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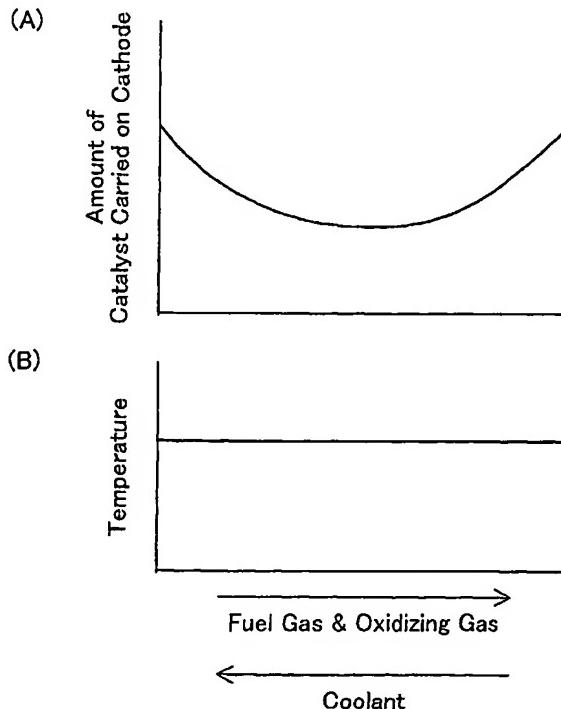
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(54) PILE A COMBUSTIBLE  
(54) FUEL CELL

(57)

A fuel cell of the invention has a hydrogen permeable metal layer, which is formed on a plane of an electrolyte layer that has proton conductivity and includes a hydrogen permeable metal. The amount of a catalyst supported on a catalyst layer in the fuel cell is regulated according to an uneven temperature distribution in the fuel cell, which is caused by operating conditions of the fuel cell including temperatures and flow directions of fluids supplied to the fuel cell. Such regulation effectively equalizes an uneven temperature distribution in the fuel cell and thus advantageously prevents the lowered durability and the deteriorating performance of the fuel cell due to the uneven temperature distribution in the fuel cell having the hydrogen permeable metal layer.



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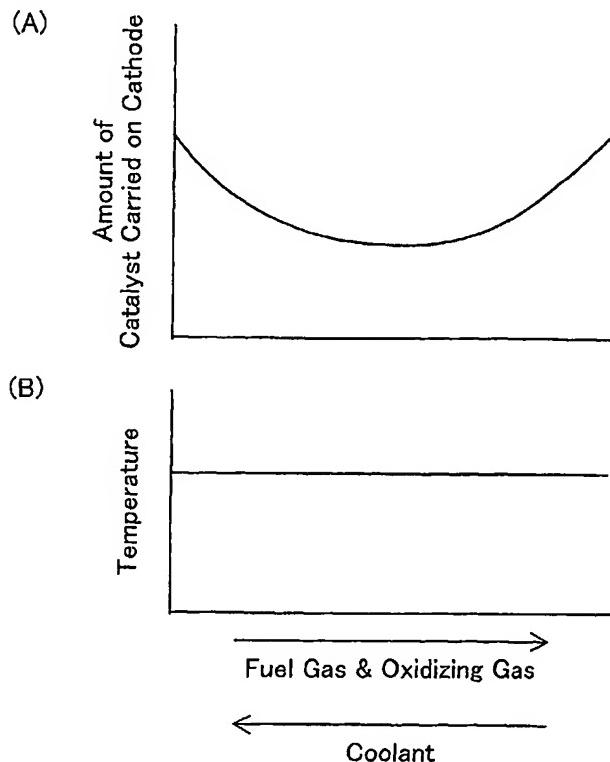
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(57) Abrégé/Abstract:

A fuel cell of the invention has a hydrogen permeable metal layer, which is formed on a plane of an electrolyte layer that has proton conductivity and includes a hydrogen permeable metal. The amount of a catalyst supported on a catalyst layer in the fuel cell is regulated according to an uneven temperature distribution in the fuel cell, which is caused by operating conditions of the fuel cell including temperatures and flow directions of fluids supplied to the fuel cell. Such regulation effectively equalizes an uneven temperature distribution in the fuel cell and thus advantageously prevents the lowered durability and the deteriorating performance of the fuel cell due to the uneven temperature distribution in the fuel cell having the hydrogen permeable metal layer.